DOCUMENT RESUME

ED 285 447 HE 020 533

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TITLE Research Degree Study at the University of New South Wales. Academic Staff Survey, 1985. Preliminary Presentation of Data. Research and Development Paper No. 64.
INSTITUTION New South Wales Univ., Kensington (Australia). Tertiary Education Research Centre.
REPORT NO ISBN-909528-35-7
PUB DATE May 86
NOTE 32p.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *College Faculty; *Doctoral Programs; Education Work Relationship; Foreign Countries; *Graduate Study; Higher Education; *Masters Programs; Questionnaires; *Research; *Teacher Attitudes
IDENTIFIERS *University of New South Wales (Australia)

ABSTRACT

Results of a 1985 survey of 497 academic staff concerning research degree study at the University of New South Wales (Australia) are summarized. Issues addressed by the survey were: the relevance of research study, desirable levels of enrollment in research study by field, the relationship between the Ph.D. and research master's programs, duration of enrollment in research programs, and specific problem areas in research programs and supervision. Despite some staff having reservations about the appropriateness of research degree training for vocational goals outside academia, and an apparent awareness of limited opportunities for research graduates, there was almost no support for reducing number of Ph.D. or research master's candidates. Respondents' views concerning the appropriateness of research degree training for the following vocations are reported: academic career, research career, graduate employment in the field studied, and other graduate employment. Additional topics include views about: entry criteria for research degree study; differences between Ph.D. and research master's theses; and the need for critical review of aspects of research degree study. The questionnaire is included. (SW)

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R.D. 64

RESEARCH DEGREE STUDY AT THE UNIVERSITY OF NEW SOUTH WALES

ACADEMIC STAFF SURVEY 1985

Preliminary Presentation of Data

P. Nightingale, D. Magin, & H. Simpson

May 1986

ISSN 0313-5543
ISBN 909528 35 7

RESEARCH & DEVELOPMENT PAPER

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PREFACE

This report provides a summary of quantitative results obtained from a survey of academic staff opinion about research degree study at the University of New South Wales in 1985.

The purpose of this document is to make available as early as possible the basic data collected from the survey. The survey was planned and the questionnaire was prepared by D. Magin. In his absence on long-service leave, P. Nightingale and H. Simpson proceeded with the initial data analysis and preparation of this report. Analysis of open-ended responses and more detailed analysis of data will be reported in subsequent publications. In the meantime, we will welcome any requests for further information and elaboration of the data in this report.

(A note about the presentation of data in this report:
We have rounded percentages to the nearest whole number throughout, so there are some tables in which a total population will not add up to 100%. We have starred all percentages which may be misleading because they represent a small number of respondents, 3 persons or less.)

STAFF VIEWS ON RESEARCH DEGREE STUDY
Project Officer: D.J. Magin

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1.1 INTRODUCTION

For at least twenty years there have been articles, speeches, conference papers, and even a few substantial reports on postgraduate research study in Australia. The Australian literature is parallelled by material published in the United Kingdom and the United States. Over that period of time the themes have not changed significantly. In broad terms, the call has been to reconsider the purposes of research degree study, and PhD study in particular, and to improve the provisions for PhD and other research study in our tertiary institutions.

The issues canvassed range from average duration of enrolment for research degrees, with general consensus being that students take too long (Barrett and Magin 1983, Advisory Board for the Research Councils [Swinnerton-Dyer Committee] 1982, Rudd 1975, Rudd 1985, and many others), to the regulations governing submission of research theses, with some suggesting submission of published articles rather than theses and others arguing for better definition of criteria for examination (Lovas 1980, Montgomery 1980, Nightingale 1985, Reid 1978, Rudd 1985, and many others). The criticisms of PhD study are manifold.

On the one hand, there are frequent assertions that industry would prefer to hire a BSc rather than a PhD because PhD topics are so "narrow" and the methods of research in the universities so unlike those in industry that the PhD is a positive handicap for an employee. Similarly, reformers point out that PhD study does not even adequately prepare students for academic employment, since it does nothing to train them to fulfil their responsibilities in the classroom and may even so restrict their expertise that they are unable to teach competently outside a tiny sector of an area of study. Rudd (1985) presents evidence that the holder of a postgraduate research qualification is actually disadvantaged in the job market regardless of what sort of employment is sought. On the other hand, there are frequently expressed fears of postgraduate study being demeaned by "credentialism" as students scramble to add letters after their names without genuine commitment to scholarship and advancing knowledge in their disciplines.

Despite this continuously growing body of literature, there is little documentation of the opinions held by the majority of academics who are the supervisors of students and the only ones who might initiate reform of the structures of research study. Certainly little has happened to indicate a rising tide of academic opinion favouring any changes at all. Does this preservation of the status quo indicate studied ignorance of some of the problems identified in various sources over the years? Just what are academic attitudes toward research degree study? This paper offers a preliminary analysis of quantitative data collected through a survey of academic staff of the University of New South Wales. There is open-ended data still to be analysed and an intention to conduct follow-up interviews.

1.2 ISSUES ADDRESSED BY THE SURVEY

The general areas of academic opinion surveyed were:

- the "relevance" of research study
- desirable levels of enrolment in research study
- the relationship between PhD and research Masters programs
- duration of enrolment in research programs
- specific problem areas in research programs and supervision

(See Appendix for questionnaire.)

1.3 METHOD AND RESPONSE

In early December 1985, a questionnaire was sent to all academic staff, (employed at the levels of Lecturer and above) of the University of New South Wales. Since the response was anonymous, a follow-up letter was sent to the entire original mailing in February 1986. University Statistics for 1985 specify 1068 staff in this population, of whom 497 responded to the survey. The response rate of 46.5% may be adjusted to approximately 50% by allowing for the number of staff who were likely to be on study leave.

Although this is a disappointing response, it does seem to represent a reasonable cross-section of the University's staff.

Table 1.1 compares the percentages of staff at different levels of appointment, and in the Faculties of the University with the percentages in the response group. Lecturers are slightly under-represented in the response group, and professorial staff slightly over-represented. It would seem reasonable to assume that non-respondents were people less likely to be supervising theses so fewer lecturers answered the questionnaire. Similarly staff of Faculties such as Engineering, Law, and Commerce where fewer students undertake research degrees are slightly under-represented.

Table 1.1: Response Group Compared to Total Population

		% of Respondents		% of University
Position	Lecturer	25		30
	Sr Lec	42		42
	Assoc Prof	19		16
	Prof	14		12
	(total)	100		100
Faculty	Applied Sci	12		10
	Architecture	5		6
	Arts	9		10
	Biol Sci	8		7
	Commerce	7		10
	Engineering	14		15
	Law	2		5
	Medicine	7		8
	Professional Studies	5		5
	Science	11		12
	Australian Graduate School of Management	3		2
	Military Studies	8		8
	(missing value)	9	(other)	2
	(total)	100		100

1.4 THE POPULATION

Respondents were asked how many PhD and Masters candidates they had supervised and how many theses they had examined in the last five years. Table 1.2 summarizes this information. We were surprised at how few of the respondents could be classed as "active" supervisors and/or examiners, especially since we assume that an even larger proportion of non-respondents are inactive. An interesting question to follow-up is whether the presently inactive supervisors are also inexperienced supervisors and examiners; that is, have those who have had only one or no students in the last five years ever had research students?

Table 1.2: Supervising and examining activity of respondents in past five years

	% of respondents who			
	Supervised		Examined	
No. students	PhD	Masters	PhD	Masters
0	31	41	45	44
1	19	17	14	15
2-3	26	25	21	25
4+	24	14	19	14
(total)	100	97	99	98

Respondents were also asked how long they had held an academic position in an Australian university (Table 1.3). Not only are 3/4 of the respondents in senior academic positions, but also more than 80% of them have held an academic position for more than 5 years.

Table 1.3 Respondents' experience in academic position in Australian university

Years	% of respondents
1- 2	7
3- 5	10
6-10	21
10-20	45
20+	17
	100

SECTION 2 "RELEVANCE" OF RESEARCH STUDY

A number of survey items addressed the issue of how appropriate research study is for various career paths.

Table 2.1: Opinion of appropriateness of research degree training for various vocations

	% of respondents judging research degree training at level of PhD to be				
	comp'ly appro	gen'ly appro	gen'ly inappro	comp'ly inappro	no opin
Academic career	65	32	1	0.2	0.4
Research career	47	46	4	0.8	1
Grad. employment in field studied	14	41	32	4	6
Other graduate employment	6	34	36	8	13

	% of respondents judging research degree training at level of Masters to be				
	comp'ly appro	gen'ly appro	gen'ly inappro	comp'ly inappro	no opin
Academic career	21	30	33	8	4
Research career	25	51	13	2	6
Grad. employment in field studied	17	50	21	2	7
Other graduate employment	8	45	25	5	14

Not surprisingly, a large majority of respondents believe a PhD is either "completely appropriate" or "generally appropriate" for an academic career or for a research career outside of educational institutions (Table 2.1). But more surprisingly, 40% thought a PhD appropriate to graduate level employment outside the major field of study or profession.

The Masters by research was judged appropriate for entering an academic position by only 51% of respondents but suitable for a research career by 76%. Cross-tabulations by Faculty showed that a research Masters was more acceptable for an academic career in Architecture, Commerce, Law, Professional Studies, and Military Studies. It was least acceptable to respondents in the Biological Sciences and Science Faculties. Compared to opinion of the PhD, more respondents thought a Masters by research appropriate to graduate employment either within or outside students' area of study.

However, when asked directly which qualification was most useful for students not intending an academic or research career (Table 2.2), 58% of academic respondents favoured a coursework Masters which includes a project to a research degree (19%) and to an entirely coursework degree (10%), (13% offered no opinion). There was stronger support for research programmes in Faculties of Medicine, Biological Sciences, and Science; stronger support for coursework which includes a project in Architecture, Engineering and Professional Studies; and stronger support for entirely coursework programmes in Commerce and the Australian Graduate School of Management.

Table 2.2 Response by Faculty to question: For students who intend to pursue a career within their own profession (excluding an academic or research career), which form of higher degree training do you believe provides the most useful vocational preparation?

% of Faculty respondents

	No.	Research degree Ph.D. or Masters	Coursework Masters inc'g project	Coursework (only) Masters	No opinion/ unable to judge
		%	%	%	%
Applied Sci.	(55)	18	62	11	9
Architecture	(24)	8*	79	4*	8*
Arts	(45)	18	44	4*	33
Biological Sci.	(38)	34	53	0	13
Commerce	(34)	6*	53	38	3*
Engineering	(67)	8	73	12	7
Law	(9)	0	67	11*	22*
Medicine	(34)	32	44	3*	18
Prof. Studies	(25)	4*	84	8*	4*
Science	(51)	41	47	2*	8
AGSM	(13)	0	46	31	23*
Military Sts.	(39)	26	46	15	13
Unclassified	(7)	14*	57	0	29*
% of Total response		19	58	10	13

(missing observations = 56)

* 3 persons or less

Some degree of support for the following statement was expressed by 69% of respondents: "Academic staff should make prospective candidates more aware of the limitations and realities of the job market for research graduates in the discipline" (Table 2.3). Differences between Faculties were small.

Table 2.3 Agreement with the statement: Academic staff should make prospective candidates more aware of the limitations and realities of the job market for research graduates in the discipline.

% of respondents				
strongly support	tend to support	tend not to support	strongly oppose	no opinion
23	46	17	3	11

SECTION 3 DESIRABLE LEVELS OF ENROLMENT IN RESEARCH STUDY

Despite some staff having reservations about the appropriateness of research degree training for vocational goals outside academia, and an apparent awareness of limited opportunities for research graduates, there was almost no support for reducing numbers of PhD or research Masters candidates in the respondents' own schools. A 68% majority favour increasing PhD enrolments and 54% favour more research Masters (Table 3.1).

Table 3.1 Faculty opinion of desirable level of enrolments (Ph.D. and Masters) in respondent's own school

% of Faculty respondents

		Should remain present levels		Should be increased		Should be reduced	
	(Ph.D. No.)	Ph.D. %	Masters %	Ph.D. %	Masters %	Ph.D. %	Masters %
Applied Sci.	(57)	32	58	60	40	7	2*
Architecture	(24)	21	33	79	63	0	4*
Arts	(45)	33	40	53	47	13	13
Biological Sc.	(37)	27	48	73	46	0	5*
Commerce	(34)	29	39	67	39	3*	21
Engineering	(68)	19	24	81	73	0	3*
Law	(7)	14*	43*	86	57	0	0
Medicine	(36)	36	48	58	45	3*	7*
Prof. Studies	(24)	41	43	58	57	0	0
Science	(52)	28	42	69	56	2*	2*
AGSM	(14)	29	25*	64	75*	7*	0
Military Sts.	(38)	13	22	82	76	5*	3*
Unclassified	(5)	100	80	0	20*	0	0
% of Total respondents		28	40	68	54	4	6

(missing observations for Ph.D. = 56)

(Missing observations for Masters = 78. Most of the increase is in AGSM and Medicine.)

* 3 persons or less

These increases were not to be achieved by changing entry criteria, however; 73% oppose less restrictive requirements for admission (Table 3.2). (Conversely, 64% oppose more restrictive admission criteria - Table 3.3.) Apparently the increased enrolments were to be achieved by more active recruiting of students: 77% supported the statement that "Academic staff should be more active in encouraging qualified students to seriously consider undertaking research degree study" (Table 3.4).

In addition, although there are doubts expressed frequently about the progress of part-time research students, 66% of respondents do not wish to see part-time research study discouraged (Table 3.5). Rudd (1975) reported that part-time students were among the most likely to take unduly long to complete or not to complete at all; Macquarie University data (Nightingale 1984) did not confirm Rudd's findings for PhD students, but there were higher percentages of withdrawals among part-time Masters (Hons) students.

Table 3.2 Agreement with statement: Entry criteria for research degree study should be made less restrictive.

% of respondents				
strongly support	tend to support	tend not to support	strongly oppose	no opinion
4	16	47	26	7

Faculty differences were small, with Law and Medicine being marginally more in favour than is the University community as a whole.

Table 3.3 Agreement with statement: Entry criteria for research degree study should be made more restrictive.

% of respondents				
strongly support	tend to support	tend not to support	strongly oppose	no opinion
6	22	48	16	8

Faculty differences were small, with Applied Science offering more support for the statement than does the University community as a whole. Architecture is strongest in opposition.

Table 3.4 Agreement with statement: Academic staff should be more active in encouraging qualified students to seriously consider undertaking research degree study.

% of respondents strongly support	tend to support	tend not to support	strongly oppose	no opinion
28	49	15	2	6

Faculty differences were small, with strongest support for the statement coming from Commerce and weakest from Biological Sciences.

Table 3.5 Agreement with statement: Part-time study for research degrees should be discouraged.

% of respondents strongly support	tend to support	tend not to support	strongly oppose	no opinion
8	20	30	36	4

Faculty differences were small, with strongest opposition to the statement coming from Arts and Professional Studies.

SECTION 4 RELATIONSHIP BETWEEN PhD AND MASTERS RESEARCH PROGRAMS

It has been suggested that the interests of many candidates for Masters by research would be better served by undertaking PhD study or else a Masters programme which consists mainly of coursework. This argument is advanced by those who find inadequate the criteria for distinguishing between the two levels of research degrees; by those who believe research degrees are irrelevant to most non-academic careers; and by those who will not accept a research Masters degree as adequate qualification for an academic career. However, only 54% of respondents agreed to any extent with the statement that research Masters candidates would be better served by undertaking PhD or coursework Masters programmes; and of these, more than half tempered their agreement "with qualification" (Table 4.1).

Table 4.1 Agreement with statement: The interests of many candidates for Masters by research only would be better served by undertaking either PhD study, or else a Masters program which consists mainly of coursework.

% of respondents				
Agree	Agree with qualification	Disagree with qualification	Disagree	No opinion/ unable to say
23	31	14	20	12

Respondents who felt able to judge were asked to what extent they found differences between research Masters and PhD theses to be evident (Table 4.2). Although we found some 50% of our respondents to be "inactive" as supervisors and/or examiners, only about 28% of respondents said they were unable to make a judgment on this matter. (There was, however, a nearly 50% abstention in Faculties of Architecture, Law, Medicine, Professional Studies, and the Australian Graduate School of Management.) Over 64% of all respondents judged at least small differences to be evident in scope, originality, significance of the contribution to knowledge, overall quality of the work, and length of thesis.

Table 4.2 Judgment of differences between theses for Ph.D. and research Masters

% of respondents

	Major differences evident %	Small differences evident %	No differences evident %	Unable to judge %
Scope of research	55	16	1	27
Originality of research	44	22	6	28
Significance of contribution to knowledge	48	21	3	28
Length of thesis	37	27	8	28
Overall academic quality of work	42	24	4	30

About half of the respondents who believe there is a major difference between work at the level of the research Masters and the PhD agree, nevertheless, that the interests of research Masters students would be better served by enrolling in PhD or coursework Masters programs. As would be expected, agreement with this advice is stronger among those who see only small differences or none at all between the two research degrees (Table 4.3).

Table 4.3 Judgments of interests of research Masters candidates (Table 4.1) by difference in scope of research at Ph.D. and Masters level (Table 4.2)

% of respondents

	Major diff. %	Small diff. %	No diff. %	Unable to judge %	Row total %
Agree	12	6	1	5	24
Agree with qualification	16	5	1	9	31
Disagree with qualification	9	2	0	3	14
Disagree	14	2	0	4	20
No opinion/ unable to say	5	1	0	6	12
Column total	56	16	2	27	

(N.B. Differences in totals between tables is result of rounding percentages to nearest whole number.)

A related question sought opinion about the purpose of PhD study and the role of the thesis. Respondents were asked to choose between the following options:

* The primary purpose of PhD education is to prepare candidates to become competent in conducting research in the discipline. What is essential is the quality of the training and research skills which are developed. The thesis serves the important function of documenting a successful period of training. (Chosen by 29% of respondents)

* The primary purpose of PhD education should be the advancement of knowledge within the discipline. The thesis is seen as central to this purpose, and should embody an original contribution to knowledge. (Chosen by 20%)

* It is misplaced to attempt to claim a primacy of purpose for one or the other of these two functions - they are sides of the one coin. (45%)

* None of the above provide a representation of my view. (5%)

* No opinion (1%)

These differing opinions were evident in roughly the same proportions in the Faculties, except that: a 54% majority in Architecture chose the second option; 43% in the Australian Graduate School of Management chose the first option; and in Biological Sciences 32% voted for the first, 24% for the second, and 37% for the third (Table 4.4).

Table 4.4 Purpose of Ph.D. education/nature of thesis by Faculty.

% of Faculty respondents

	No.	Option 1 Research Training %	Option 2 Advance Knowledge %	Option 3 Both %	Option 4 None of Three %	Option 5 No opinion %
Applied Sci.	(58)	16	24	55	5*	0
Architecture	(24)	8*	54	33	4*	0
Arts	(45)	18	22	49	9	2*
Biological Sci.	(38)	32	24	37	8*	0
Commerce	(35)	31	14	51	0	3*
Engineering	(68)	37	16	44	2*	1*
Law	(9)	11*	22*	44	22*	0
Medicine	(36)	28	11	50	6*	6*
Prof. Studies	(25)	20	24	48	8*	0
Science	(52)	44	12	42	2*	0
AGSM	(14)	43	21*	21*	14*	0
Military Sts.	(39)	36	10	49	5*	0
Unclassified	(7)	43*	43*	14*	0	0
& of total	(450)	29	20	45	5	1

(missing observations = 47)

* 3 persons or less

SECTION 5 DURATION OF ENROLMENT IN RESEARCH PROGRAMS

Much of the disquiet expressed over research degree study has concerned slow rates of progress and failure to complete theses. Slightly over half (53%) of the respondents felt it desirable to reduce average time for completion of PhDs, and an additional 26% thought it urgent to do so; respondents from the Faculty of Applied Science expressed the greatest sense of urgency on this matter (Table 5.1).

Table 5.1 Faculty opinion of need for reduction in time taken to complete Ph.D. study

% of Faculty respondents

	(No.)	Urgent to reduce time taken %	Desirable to reduce time taken %	Probably not desirable to change present sit %	Oppose change %	None of these %
Applied Sci.	(58)	40	41	10	0	9
Architecture	(24)	12*	50	25	12*	0
Arts	(45)	18	47	24	2*	9
Biological Sci.	(38)	29	61	5*	3*	3*
Commerce	(36)	25	50	19	0	6*
Engineering	(68)	26	56	14	2*	2*
Law	(8)	38*	38*	12*	12*	0
Medicine	(36)	25	61	11	0	3*
Prof. Studies	(25)	24	64	4*	0	8*
Science	(51)	29	55	6*	4*	6*
AGSM	(14)	29	50	7*	7*	7*
Military Sts.	(39)	23	54	15	8*	0
Unclassified	(7)	0	71	14*	14*	0
% of total	(440)	26	53	13	3	4

(missing observations = 48)

* 3 persons or less

However, when asked about rates of progress in their own schools, the percentage of respondents from all Faculties saying PhDs were taking too long dropped from this 79% to 49% (Table 5.2). Respondents from the Faculty of Biological Sciences expressed more concern over rates of progress in their own school than did respondents from any other Faculty (including Applied Science); 78% of staff in Biological Sciences said they thought PhD candidates were taking too long to complete their work. This did seem strange since the literature consistently identifies social science and humanities students as the ones most likely to have overly long candidatures.

There was less concern about research Masters' progress with 34% of the total saying they were taking too long in the respondent's own school (Table 5.2); in the area of research Masters it was the Faculty of Professional Studies which was proportionately more concerned (54% of Faculty respondents).

Table 5.2 Faculty opinion: Are research degree candidates taking too long to complete programs?

% of Faculty respondents

		Insufficient knowledge to comment		Yes		No		Uncertain	
	(Ph.D. No.)	Ph.D. %	Masters %	Ph.D. %	Masters %	Ph.D. %	Masters %	Ph.D. %	Masters %
Applied Sci.	(57)	14	19	42	39	39	37	5*	5*
Architecture	(24)	25	21	46	42	25	33	4*	4*
Arts	(43)	12	21	58	37	21	26	9	16
Biological Sci.	(37)	3*	22	78	40	14	24	5*	14
Commerce	(36)	22	27	47	24	19	27	11	21
Engineering	(68)	18	22	53	31	24	31	6	16
Law	(9)	22*	22*	33*	44	11*	11*	33*	22*
Medicine	(35)	23	39	29	16	40	39	9*	6*
Prof. Studies	(25)	24	21	56	54	12*	12*	8*	12*
Science	(52)	10	24	50	34	31	32	10	10
AGSM	(14)	14*	86	36	14*	43	0	7*	0
Military Sts.	(39)	28	37	51	29	18	24	3*	10
Unclassified	(7)	43*	33*	0	17*	43*	33*	14*	17*
% of total	(446)	17	26	49	34	26	29	8	12

(missing observations for Ph.D. = 51)

(missing observations for Masters = 70. Most of increase is in AGSM, Medicine, and Commerce.)

* 3 persons or less

The survey sought to identify particular aspects of research study which respondents felt needed critical review or change. They were asked to judge whether particular aspects were satisfactory for PhD and Masters level study separately (Table 5.3). Though the same aspects were identified as most in need of review, the percentages judging that there were problems for Masters work were smaller than for PhD.

Table 5.3 Need for critical review of aspects of research degree study.

% of respondents

	Review not required		Should be reviewed		No opinion	
	Ph.D. %	Masters %	Ph.D. %	Masters %	Ph.D. %	Masters %
Entry requirements/ regulations	69	62	23	20	6	12
Preparation of students to undertake research	38	36	52	44	8	12
Supervision of candidates	44	43	47	39	6	11
Scope of research undertaken	57	50	30	27	10	16
Topic selection	61	54	27	24	10	15
Quality of thesis work	67	59	20	18	11	15
Resources for undertaking research (e.g. lab. equipment)	33	30	56	48	9	15
Average time taken to design study & collect data	36	32	46	41	15	20
Average time taken to "write up" thesis after data collection	34	32	51	43	13	18
Procedures governing examination of theses	60	54	26	22	12	17
Regulations governing award of degrees	69	62	13	11	16	21

N.B.: A number of respondents chose not to answer regarding Masters degrees. Hence, total percentages of the three Masters columns are in the low nineties.

Of the eleven items listed, respondents were most concerned about:

* Resources for undertaking research (eg. lab equipment etc) (56% and 48% say this should be reviewed for PhD and Masters study respectively.)

* Preparation of students to undertake research investigation (52%, 44%)

* Average time taken to "write up" thesis after data collection (51%, 43%)

* Supervision of candidates (47%, 39%)

* Average time taken to design study and collect data (46%, 41%)

Though 52% say the preparation of students needs review at PhD level, 69% believe entry requirements to be satisfactory. The latter is indeed one of two aspects identified by the fewest as needing review at either PhD or Masters level. (The other is regulations governing award of degrees.)

Response from the Faculty of Biological Sciences to this section of the questionnaire suggests that they believe the problem of duration of PhD enrolment is caused by students' taking too long to design their study and collect data and also taking too long to write up. This Faculty was more satisfied than any other with the preparation of their students to undertake research and with supervision of candidates and no more concerned than others about resources for undertaking research.

SECTION 6 DISCUSSION

Until the remaining data are analysed and follow-up interviews conducted, it is not possible to say whether the results of the survey here reported suggest a continuing failure to deal with the questions and criticisms which have appeared again and again in the literature of higher education. Nevertheless, at this stage we are speculating that although some organisers of seminars and workshops have found a fair-sized market for activities concerning postgraduate supervision and thesis-writing, it would seem that many academic staff remain unaware of (or unconvinced by) much of the research on postgraduate education and many recommendations of those engaged in evaluation of postgraduate programs (See, for instance, Rudd 1985, Moses 1985, Nightingale 1984, Barrett and Magin 1983). Stranks (1984) identifies both strengths and weaknesses of the present model of PhD education and realistically suggests reforms which will assist graduates to operate in "real world" situations as opposed to the "ivory tower" ones for which critics claim they are solely suited; these include supervisory committees, reduction of the content of Australian PhD theses (but not the standard), better counselling of students, encouraging a period of employment before PhD study, and coursework (including modules in business management).

Particularly we note that the percentage of academics who believe students to be taking too long to complete research degrees in their own schools is considerably lower than the percentage who say, in general, that we should find ways to reduce time to completion. If they were aware of Rudd's A New Look at Postgraduate Failure which repeatedly emphasises that "If a student has not completed a PhD within three years, he [sic] will have increasing difficulty completing it at all" (p. 115), would even a substantial minority appear to believe the problem is someone else's?

We also have difficulty reconciling academics' identifying students' preparation to undertake research as a problem, while they are satisfied with current entry criteria. Rudd suggests a substantial reform which would have students formulate a full-blown research proposal before they are accepted as candidates. Macquarie University's Postgraduate Evaluative Study (Nightingale 1984) also recommends several strategies for provisional acceptance of students whose ability or preparation for research is doubtful rather than offering direct admission.

Finally, we wonder at the substantial disagreement between respondents (even those in the same Faculty) about the purpose of PhD study in general and the thesis in particular. Those who consider that the thesis "documents a successful period of training" in research skills may find it difficult to explain how a research Masters degree programme differs. Those who see the thesis as advancing knowledge within the discipline and making an original contribution may be adding to an upward spiral in expectations which some believe encourages long periods of candidature. Those who claim that the thesis achieves both may not have fully considered some of the contradictions inherent in such a view. Especially now when Colleges and Institutes of Technology are offering more postgraduate programmes and seeking to offer postgraduate research degrees, including the PhD, it is essential for such issues to be canvassed rationally and intelligently without allowing sectoral rivalries to cloud judgment.

These are some of the apparent contradictions which we will continue to investigate. Ultimately we hope that our work will encourage academic staff of this and other institutions of higher education to engage in informed discussion within their own particular contexts of the important issues concerning postgraduate research.

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APPENDIX

The Questionnaire

1. What is your view on the current level of enrolments in research degree study in your school?

(i) Ph.D. enrolment levels:

	(Place appropriate number in box)	Office use only
1. should be kept at about present levels		
2. should be increased		
3. should be reduced	☐	1

(ii) Masters by research only enrolment levels:

1. should be kept at about present levels		
2. should be increased		
3. should be reduced	☐	2

Comment: _____

_____

2. With respect to the determination of appropriate research degree enrolment levels within your OWN SCHOOL, which if any of the following actions should be taken?

Use the following code:

1. I strongly support this
2. I would tend to support this
3. I would tend not to support this
4. I am strongly opposed to this
5. No opinion

(i)	Entry criteria for research degree study should be made more restrictive	☐	3
(ii)	Entry criteria for research degree study should be made less restrictive	☐	4
(iii)	Academic staff should be more active in encouraging qualified students to seriously consider undertaking research degree study	☐	5
(iv)	Academic staff should make prospective candidates more aware of the limitations and realities of the job market for research graduates in the discipline	☐	6
(v)	Schools should seek increased resource support to provide for expansion of research degree facilities and undertakings	☐	7
(vi)	Part-time study for research degrees should be discouraged	☐	8
(vii)	Other? (please specify) _____	☐	9

Comment: _____

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3. In your view, how appropriate is research degree training for each of the following vocations?

Use the following code:

1. Completely appropriate
2. Generally appropriate
3. Generally not appropriate
4. Completely inappropriate
5. No opinion

		Ph.D.	Masters by research only	
(i)	Academic position in a university or tertiary institution	☐	☐	10, 11
(ii)	Research career outside of university/tertiary institution	☐	☐	12, 13
(iii)	Graduate level employment in the same field of study or profession	☐	☐	14, 15
(iv)	Engagement in other graduate level employment	☐	☐	16, 17

Comment: _____

_____

_____

Office use only

4. For students who intend to pursue a career within their own profession (excluding an academic or research career), which form of higher degree training do you believe provides the most useful vocational preparation?

   1. Research degree (Ph.D. or Masters by research only)
   2. Masters degree consisting of coursework and project
   3. Masters degree consisting of coursework only
   4. No opinion/unable to say ☐ 18

Comment: _____

_____

_____

5. In 1983 the Commonwealth Department of Education and Youth Affairs published a report titled 'An evaluation of the Commonwealth's Postgraduate Awards Scheme'. In that study it was reported that 40% of students who had commenced full-time Ph.D. study on a Commonwealth award had not subsequently submitted a Ph.D. thesis within six years of initial enrolment. 28% of all award holders had submitted a thesis within four years of their initial enrolment. With respect to the situation indicated by these data, which if any of the following statements most closely represents your own view?

   1. There is an urgent need to find ways to reduce substantially the average time for completion of Ph.D. study
   2. It would be desirable to find ways to reduce the average time for completion of Ph.D. study
   3. It would probably not be desirable to attempt to change the present situation
   4. Any attempts to change the present situation should be opposed
   5. None of the above ☐ 19

Comment: _____

_____

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_____

4. Within your own SCHOOL, do you believe that research degree candidates are, on average, taking 'too long' to complete their degrees?

   1. Unable to comment - I have insufficient knowledge of the situation
   2. Yes
   3. No
   4. Uncertain

	Ph.D.	Masters by research only
	☐	☐

20, 21

Comment: _____

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_____

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Office use only

7. If you have read or examined a number of theses for Ph.D. and Research Masters, you may have made some judgements about general differences between the two. Please indicate your own judgement on the following aspects of thesis work, using the code:

(In general) 1. Major differences are evident
2. Small differences are evident
3. No differences are evident
4. Unable to make a judgement or generalisation

(i) The scope of the research ☐ 22

(ii) Originality of the research ☐ 23

(iii) Significance of the contribution to knowledge ☐ 24

(iv) Length of thesis ☐ 25

(v) Overall academic quality of the work ☐ 26

Comment: _____

_____

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_____

8. It has been suggested that the interests of many candidates for Masters by research only would be better served by undertaking either Ph.D. study, or else a Masters programme which consists mainly of coursework. What is your own view on this?

1. Agree
2. Agree, with qualification
3. Disagree, with qualification
4. Disagree
5. No opinion/unable to say ☐ 27

Comment: _____

_____

_____

_____

9. There has been much discussion in recent years with respect to the purpose of Ph.D. education and the role of the thesis in Ph.D. programmes. Which following statement most closely represents your own view on the place of the thesis in Ph.D. education?

1. The primary purpose of Ph.D. education is to prepare candidates to become competent in conducting research in the discipline. What is essential is the quality of the training and research skills which are developed. The thesis serves the important function of documenting a successful period of training.
2. The primary purpose of Ph.D. education should be the advancement of knowledge within the discipline. The thesis is seen as central to this purpose, and should embody an original contribution to knowledge.
3. It is misplaced to attempt to claim a primacy of purpose for one or the other of these two functions - they are sides of the one coin.
4. None of the above provide a representation of my view. (If so, please outline below.)
5. No opinion ☐ 28

Comment: _____

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Office use only

10. Listed below are a number of different facets of research degree study. From your knowledge of research degree study in your own faculty, you may view many of these aspects as operating quite satisfactorily. Some aspects however may be viewed as requiring critical review to enable improvement or change. Please indicate which, if any, of these aspects should be critically reviewed, either at faculty or university level.

Use the following code:

1. Satisfactory - review is not required
2. This should be reviewed
3. No opinion

		Ph.D.	Masters by research only	
(i)	Entry requirements/regulations	☐	☐	29, 30
(ii)	Preparation of students to undertake research investigation	☐	☐	31, 32
(iii)	Supervision of candidates	☐	☐	33, 34
(iv)	Scope of the research undertaken	☐	☐	35, 36
(v)	Topic selection	☐	☐	37, 38
(vi)	Quality of thesis work	☐	☐	39, 40
(vii)	Resources for undertaking research (e.g. lab. equipment etc.)	☐	☐	41, 42
(viii)	Average time taken to design study and collect data	☐	☐	43, 44
(ix)	Average time taken to 'write up' thesis after data collection	☐	☐	45, 46
(x)	Procedures governing examination of theses	☐	☐	47, 48
(xi)	Regulations governing award of degree	☐	☐	49, 50
(xii)	Other? (please specify) _____			
	_____	☐	☐	51, 52

Comment: _____

_____

_____

_____

(BIOGRAPHICAL)

11. Position:
1. Lecturer
2. Senior Lecturer
3. Associate Professor
4. Professor

☐ 53

12. Number of years in an academic position in an Australian university:

1. 1 - 2 years
2. 3 - 5 years
3. 6 - 10 years
4. 10 - 20 years
5. more than 20 years

☐ 54

13. Total number of students supervised for research degree study within the last five years:

Use the code:
1. Nil
2. one only
3. 2 - 3 students
4. 4 - 8 students
5. 9 - 12 students
6. more than 12 students

Ph.D.	Masters by research only	
☐	☐	55, 56

14. Total number of theses which you have examined in the last five years:

Use the code:
1. Nil
2. one only
3. 2 - 3
4. 4 - 8
5. 9 - 12
6. more than 12

Ph.D.	Masters by research only	
☐	☐	57, 58

15. Faculty _____ 59, 60

(If you wish to make any further comments, please attach these to the questionnaire.)

Please return completed questionnaire to TERC by December 24.

THANK YOU